DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-016092 Address: 333 Burma Road **Date Inspected:** 04-Aug-2010

City: Oakland, CA 94607

OSM Arrival Time: 645 **Project Name:** SAS Superstructure **OSM Departure Time:** 1845 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes No Yang Bai Qian. **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS: Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component:** Orthotropic Box Girder (OBG)

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector, Amit K. Juvekar, was present during the times noted above for observations relative to the work being performed.

Subassembly, Bay 04, Deck Panel 13BW-DP3136-001.

This QA Inspector performed Phased Array Ultrasonic Testing (PAUT) following the guide lines of UT procedure titled "Phased Array Ultrasonic Testing for the Detection and Sizing of Suspected Planar Discontinuities (Cracks) in PJP Welds, # UT 04-0120F4 PJP Rib Weld" after ZPMC welding personnel performed weld repairs of tacked areas of the Partial Joint Penetration (PJP) welds joining u-ribs to deck plate. The deck panel examined is as follows:

DP3136-001: 14 tack weld location found compliant and 01 tack weld location found non-compliant.

Subassembly, Bay 04, 13CE, Deck Panel U-ribs.

During Random Visual in process Inspection, this QA inspector observed ZPMC personnel carrying out Weld repairs after visual testing on Deck panel to U-rib welds of Deck Panel DP3105-001. Repair carried out with Flux core arc welding (FCAW). Welder is identified as 203805; ZPMC Quality Control Inspector (QC) is identified as Guo Yan Fei. The welding variables recorded by Quality Control Inspector (QC) appeared to comply with the Applicable WPS: WPS-345-FCAW-2G(2F)-FCM-REPAIR.

Welds & Approximate Y-locations of repair were;

W141 – 50mm, 2450mm.

WELDING INSPECTION REPORT

(Continued Page 2 of 2)

W140 – 50mm, 1850mm.

Subassembly, Bay 04, 13BE, Deck Panel U-ribs.

During Random Visual in process Inspection, this QA inspector observed ZPMC personnel carrying out Weld repairs after visual testing on Deck panel to U-rib welds of Deck Panel DP3091-001. Repair carried out with Flux core arc welding (FCAW). Weld identified as DP3091-001-015. Approximate Y-locations of repair identified between 1150mm & 1750mm. Welder is identified as 062265; ZPMC Quality Control Inspector (QC) is identified as Guo Yan Fei. The welding variables recorded by Quality Control Inspector (QC) appeared to comply with the Applicable WPS: WPS-345-FCAW-2G(2F)-FCM-REPAIR. The attached photographs provide additional detail.

Subassembly, Bay 04, 13BW, Deck Panel U-ribs.

During Random Visual in process Inspection, this QA inspector observed AB/F NDT personnel "Chu Zi Qing" carrying out Magnetic Particle Testing (MT) on Deck panel to U-rib welds. Deck Panel identified as DP3132-001. The attached photographs provide additional detail.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.





Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 1500.042.2372, who represents the Office of Structural Materials for your project.

Inspected By:	Juvekar, Amit	Quality Assurance Inspector
Reviewed By:	Carreon, Albert	QA Reviewer